

**HIGHER EDUCATION  
REFORM,  
INNOVATION  
*and*  
INVESTMENT**



# **Major Recommendations Under Consideration**

**Thomas F. Farrell, II, Chairman  
M. Kirkland Cox, Vice Chairman  
*October 12, 2010***



# ***“Preparing for the Top Jobs of the 21<sup>st</sup> Century”***

## **The Virginia Higher Education Opportunity Act of 2011**

The Commission will recommend passage of major higher education legislation in 2011 committing the Commonwealth to the pursuit of national and international leadership in college degree attainment and personal income and putting Virginia on a focused and sustainable path of higher education innovation, investment and reform.



# *Preparing for the Top Jobs of the 21<sup>st</sup> Century*

## **The Virginia Higher Education Opportunity Act of 2011**

**Why higher education?**

**Why the *Top Jobs* (TJ21) legislation?**

**Why now?**

Virginia's Thomas Jefferson articulated the distinctive American vision of education as the touchstone of equality and excellence, the key to an *aristocracy of ability* that yields enlightened citizenship and expanding opportunity for all.

Virginia has made that vision a reality by developing a public-private system of higher education whose hallmarks are excellence, diversity and access.

We have a unique opportunity now to build on that solid foundation and make Virginia a national and international leader in the knowledge-based economy, preparing our young people and workforce for the top jobs in the 21st century. That's the compelling purpose of TJ21.



## **3 Major Thrusts of Report/Legislation**

- 1. ECONOMIC OPPORTUNITY –**  
**Fueling economic growth and preparing Virginians for the top job opportunities in the knowledge-based economy**
- 2. REFORM-BASED INVESTMENT –**  
**Maintaining excellence and achieving global leadership through sustained, reform-based investment and innovation**
- 3. AFFORDABLE ACCESS –**  
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## 1. ECONOMIC OPPORTUNITY –

- **100,000 more degrees in 15 years**
  - **Large economic return on investment**
    - ✓ *Measured in economic (GDP) growth, job creation, and revenues generated to state and local governments*
- **Investing in high-demand, high-earning degrees**
  - **STEM Degree Initiative**
    - ✓ *Includes other high-demand programs (eg, healthcare)*
  - **Economic opportunity metrics**
    - ✓ *Assess degree programs by marketplace demand, earnings potential*
- **Research and development**
  - **Public-private research initiative**



## ➤ The BIG Goal: 100,000 More Degrees

- Based on independent analysis (by the National Center for Higher Education Management Systems, or NCHEMS) of additional degrees needed to place Virginia among top states and countries in educational attainment and personal income.
  - ✓ *Analysis was initiated by Council on Virginia's Future during preceding administration.*
- Gov. McDonnell's proposal addressed cumulative number of additional associate (2YR) and bachelor's (4YR) degrees to be conferred by VA public colleges on Va. students over next 15 years.
  - ✓ *Under NCHEMS analysis, those public degrees would be matched by like percentage increase in the number of private undergraduate degrees (currently 30% of all degrees are conferred by privates)*
  - ✓ *Combined public-private goal over next decade is approximately 70,000 cumulative additional degrees.*



## ➤ **100,000 More Degrees:**

### *Three Primary Strategies for Achieving the Goal*

- ✓ **Increase enrollment of Virginia students by public and private colleges in Virginia.**
- ✓ **Increase degree completion by the 900,000 Virginians (21% of all working-age Virginians) who currently have partial college credit.**
- ✓ **Increase the graduation rate of Virginia students at public and private colleges in the Commonwealth.**





## ➤ 100,000 More Degrees:

### *Virginia Higher Ed's Exceptional Return on Investment*

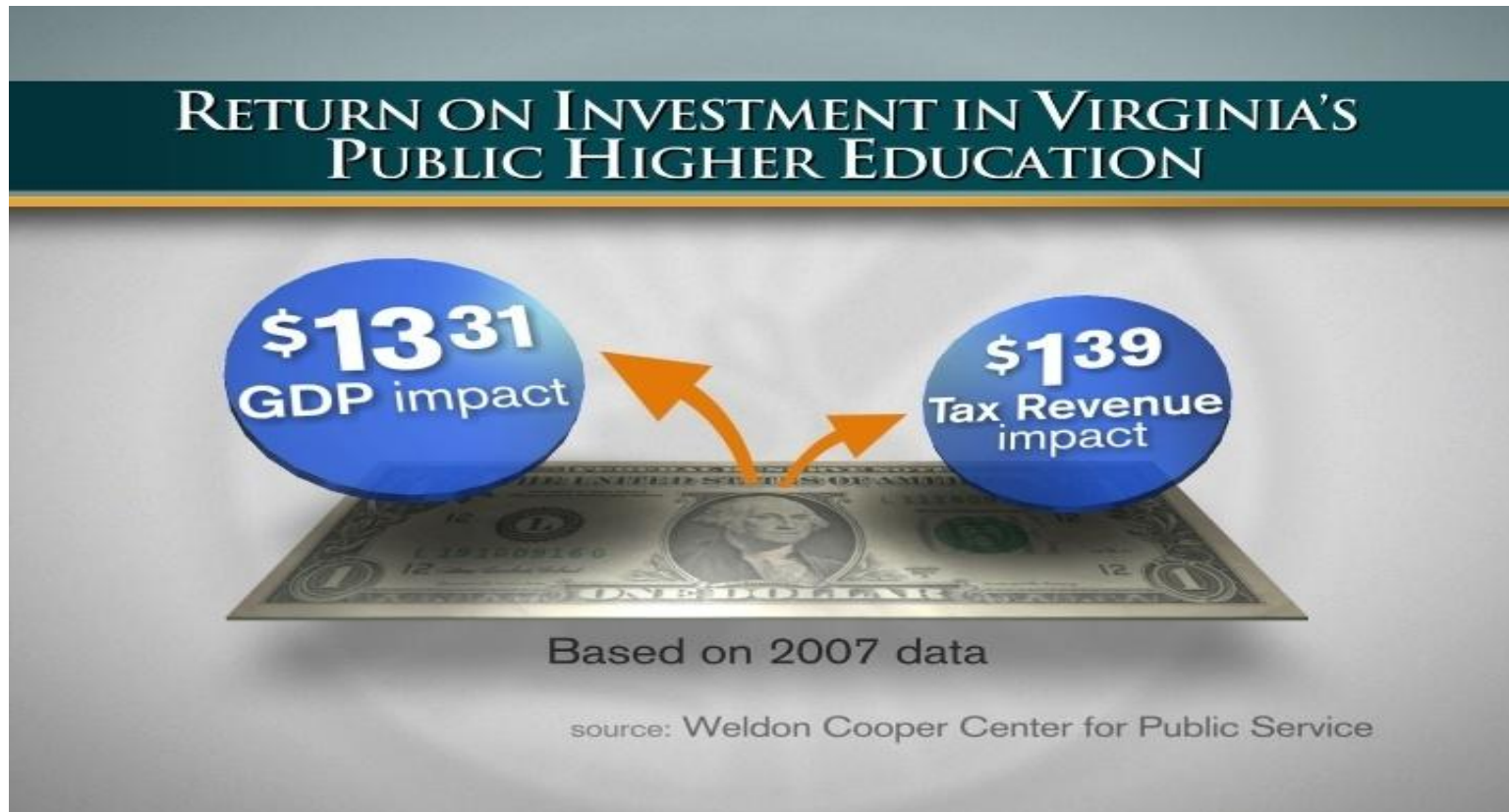
#### COOPER CENTER STUDY FINDINGS (2007 data)

- For every dollar Virginia spends on public higher education, it generates \$13.31 in gross domestic product (GDP).
- For every dollar Virginia spends on public higher education, it receives \$1.39 in state tax revenue.
- The public higher education system current accounts for:
  - \$9.5 billion annually in purchases of goods and services in VA
  - 144,550 jobs supported by higher education operations
- Each annual investment in VA's public higher education system (at 2007 level) contributes \$24 billion to state GDP and returns \$2.5 billion in state tax revenues.

# Top Jobs (TJ21) Higher Ed Legislation

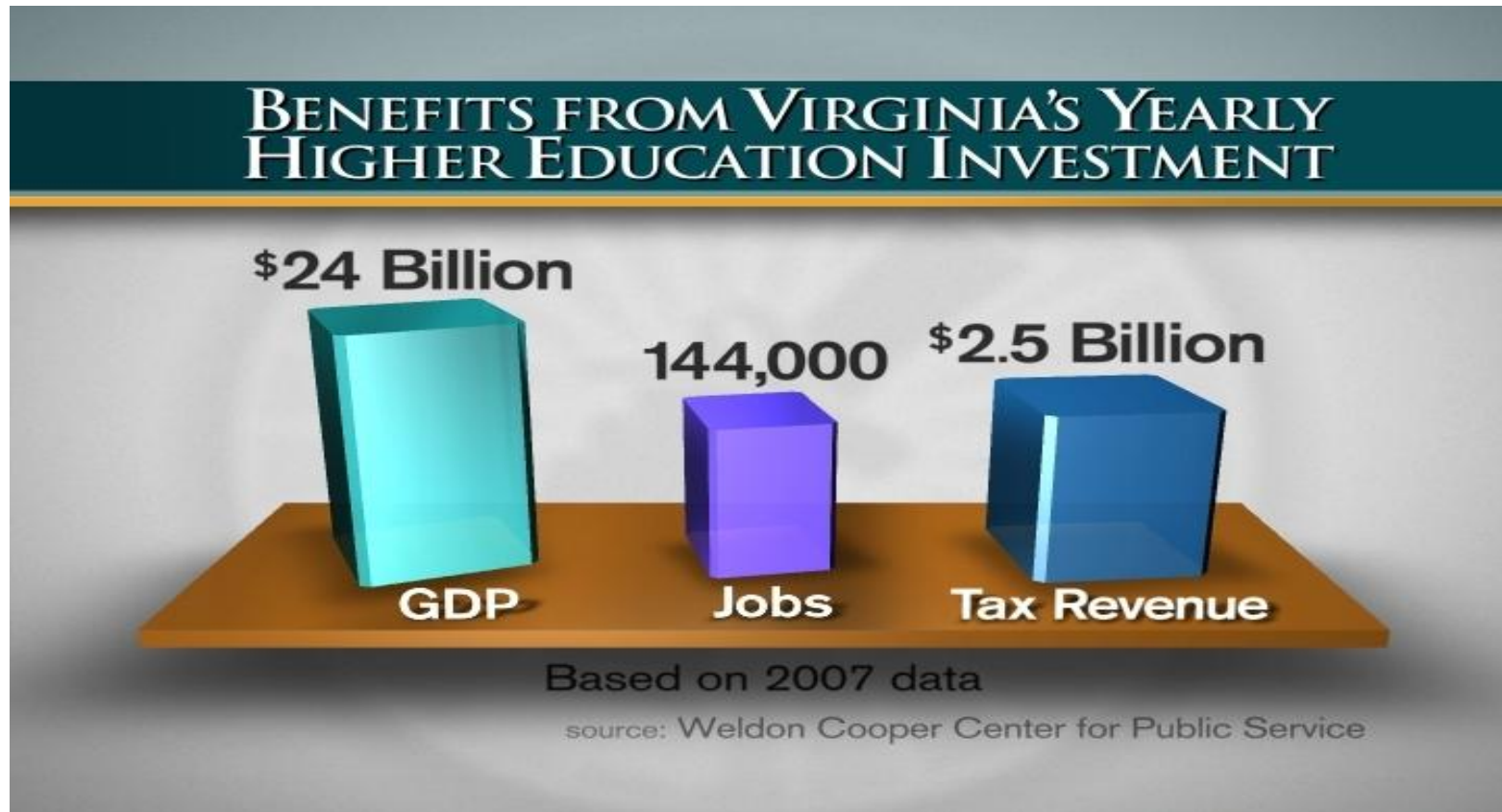


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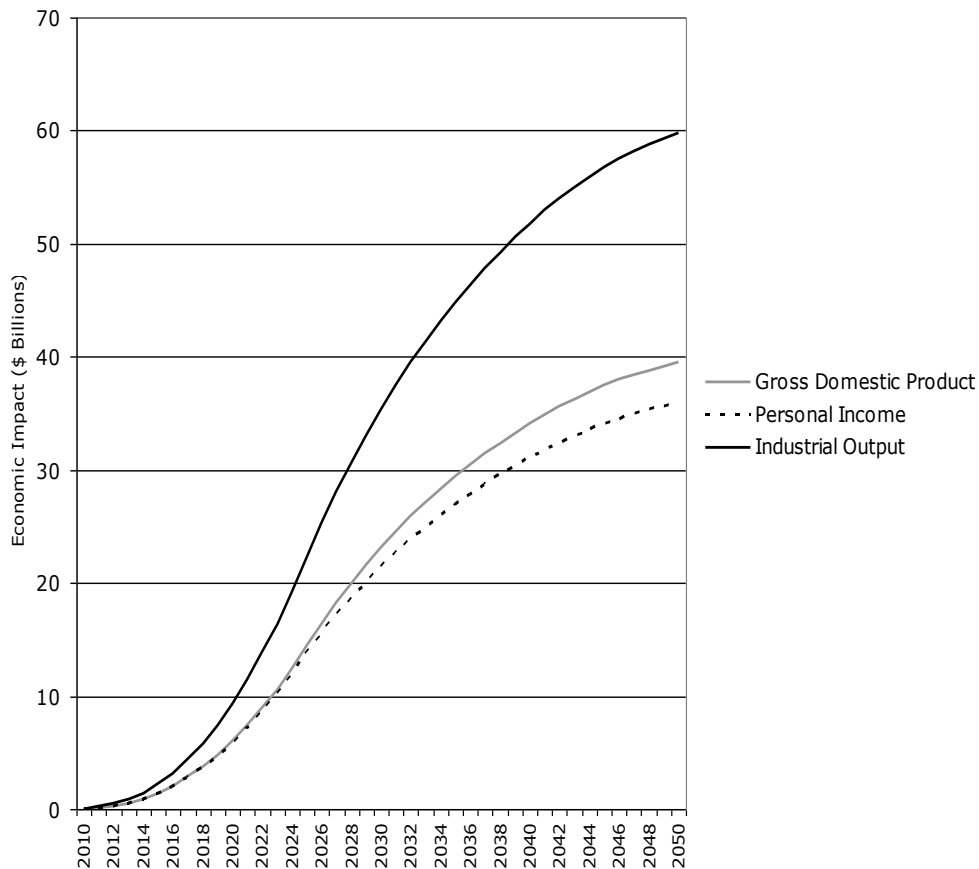
- **100,000 More Degrees:**  
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# Top Jobs (TJ21) Higher Ed Legislation



## ➤ 100,000 More Degrees: *How the Additional Degrees Will Impact VA's Economy*





## ➤ 100,000 More Degrees:

### *How the Additional Degrees Will Impact VA's Economy*

#### COOPER CENTER STUDY FINDINGS:

- Impact of 100,000 additional undergraduate degrees by 2025:
  - \$39.5 billion more in Virginia GDP
  - \$36.0 billion in increased personal income for Virginians
  - \$4.1 billion in new tax revenues for state government



## ➤ **100,000 More Degrees:**

*How Much Virginia Saves Annually Because of Degrees*

### **COOPER CENTER STUDY FINDING:**

A single year's college degree production (at 2007 levels) accounts for \$349 million in social services cost savings to the Commonwealth.



## ➤ Investing in High-Demand, High-Earning Degrees

### *The Need to Focus on STEM*

- The United States now ranks only 29th out of 109 countries in the percentage of 24-year-olds with math and science degrees.
- Virginia is comparatively strong in STEM education. We rank 9th nationally among the 50 states and the District of Columbia in the percent of degrees awards in STEM disciplines from public institutions (rises to 3rd when not-for-profit and for-profit are included).
- But STEM degree production has been flat or declining in recent years, despite expert predictions that by 2016 almost three-fourths of the fastest growing jobs in the United States will be in the STEM fields.
- To meet anticipated demand, according to one estimate presented to the Commission, Virginia will need to prepare 100,000 additional workers with STEM degrees over the next 10 years.





- **Investing in High-Demand, High-Earning Degrees**
  - **STEM Degree Initiative – Key Strategies**
    - ✓ *Form public-private partnership (foundation) to engage the business and professional community fully as statewide and regional partners in STEM instruction and promotion, and in strategic direction of STEM initiatives.*
    - ✓ *Use grant-supported initiatives and specialized STEM schools/programs to refine best practices in STEM instruction, then leverage throughout K-12.*
    - ✓ *Enhance teacher education and professional development in STEM areas, with emphasis on increasing the number of teachers with STEM degrees.*
    - ✓ *Provide financial incentives for students to pursue STEM majors and for institutions to increase capacity of STEM degree programs.*
    - ✓ *Strengthen college/career math readiness through earlier diagnosis and remediation of deficiencies in high school.*
    - ✓ *Provide STEM incentives in early college pathway programs and in the community college transfer grant program.*
  - **Economic Opportunity Metrics**
    - ✓ *Assess degree programs based on marketplace demand, earning potential, employer satisfaction, and other indicators of economic impact.*





## ➤ Public-Private Research Initiative

### *The High Return on Investment in Research*

#### COOPER CENTER STUDY FINDINGS:

- Impact (annual) of higher education research:
  - \$588 million in Virginia GDP
  - 12,927 Virginia jobs
  - \$72 million in state tax revenues
- Impact of university start-ups:
  - \$124 million in Virginia GDP
  - 1,396 jobs
  - \$9 million in state tax revenues
  - \$80 million in personal income



## ➤ Public-Private Research Initiative

- Virginia continues to lag in STEM-related university research.
- Research initiatives have been launched but not sustained.
  - ✓ *Federal research dollars are competitively awarded. Large interdisciplinary teams of top universities, researchers win most awards.*
  - ✓ *Success requires long-term commitment and reliable funding.*
  - ✓ *Partnerships with private sector are key for commercialization.*
- Key strategies:
  - ✓ *Restore/expand Higher Education Research Initiative funding, including additional support for acquisition of high-tech equipment, high-performance computing capability, and start-up packages for star faculty.*
  - ✓ *Enact a state tax credit to promote public-private collaboration and leverage private investment in research.*
  - ✓ *Establish an emerging technologies commercialization fund, with awards based on out-of-state peer review, incentives for collaboration among Virginia universities, and an initial focus on energy research.*
  - ✓ *Establish a reinvigorated program of matching funding to recruit star faculty (eminent scholars) in STEM disciplines.*



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## The Landscape

1. **A high-performing system that routinely receives accolades for quality and value.**
  - *Independent rankings give high marks for both instructional quality and tuition value at numerous Virginia institutions.*
  - *Virginia institutions are among the most cost-efficient in the country.*
2. **Deep state funding reductions during the past decade that are unsustainable.**
  - *Roughly 50% cut on per-student, constant-dollar basis since 2000.*
  - *Some loss of funding absorbed by institutions.*
  - *Much of it passed on to tuition-paying students and their families.*
3. **A urgent national challenge that, given today's economic realities, can only be addressed through a new model for delivering higher education services.**
  - *Issue at stake is global competitiveness for Virginia and US.*
  - *With our strong system, Virginia well-positioned to lead the way.*



## **2. REFORM-BASED INVESTMENT –**

### **Four (4) priority areas targeted for reform and investment**

- **Optimizing utilization of physical and instructional resources on a year-round basis.**
- **Using technology-enhanced instruction to deliver greater value to traditional and nontraditional students.**
- **Creating innovative and economical degree paths to enable more Virginians to complete degrees.**
- **Taking system-wide restructuring to the next level and creating an atmosphere of trust and collaboration.**



## 2. REFORM-BASED INVESTMENT –

- **Optimizing utilization of physical and instructional resources**
  - Year-round instruction initiative
- **Using technology-enhanced instruction to deliver greater value**
  - “Virtual Departments” resource-sharing initiative
  - Course redesign initiative
  - Online opportunities for degree completion
  - Electronic textbooks
- **Creating innovative and economical degree paths**
  - Community college transfer program
  - Early college credit and commitment initiatives
  - Expedited degree options
    - ✓ *Tuition incentives for timely completion*
    - ✓ *Remediation enhanced before college*
- **Next steps in systemwide restructuring**
  - Enhanced institutional autonomy and outcome-based accountability
    - ✓ *New performance measures (including economic metrics)*
    - ✓ *More focused and effective incentives*
    - ✓ *Institutional plans and agreements*



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## 3. AFFORDABLE ACCESS –

- **Codified policy commitment and funding model to support sustained, reform-based investment and relieve tuition pressure**
- **Increased access for Virginia students**
  - **Per-student funding to incentivize and support enrollment growth**
    - ✓ *Funding to follow the student to a public or private college*
  - **Public institutions would each make degree conferral commitments**
- **Increased need-based financial aid (grants/loans)**
  - **Target to supplement federal aid by addressing middle-income cost squeeze**
- **Rainy Day Fund to guard against tuition spikes in future downturns**



## **FUNDING MODEL OBJECTIVES**

- ✓ **Create and codify a new funding model that is understandable, predictable, and reliable.**
- ✓ **Put Virginia on a sustainable path that will place it among the top-performing states and nations as measured by the key metrics of college degree attainment and personal income.**
- ✓ **Provide financial incentives to advance TJ21 initiatives in the areas of economic opportunity, reform-based investment, and affordable access.**
- ✓ **Incorporate state policies and reforms that have served Virginia well in the past and contributed to the system's excellence.**
- ✓ **Use Virginia colleges' existing cost-efficiency (low cost per degree) as a foundation for implementing new, cost-effective models of service delivery while maintaining high quality and value/impact.**
- ✓ **Avoid or reduce the drastic swings in state funding that have impeded effective management and planning and have caused tuition to spike during times of economic stress.**



Incentives for Economic Impact and Innovation

Need-Based Financial Aid

Per-Student Enrollment Growth Funding

Basic Operations and Instruction



Incentives for Economic Impact and Innovation

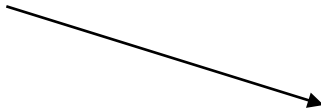
Institution-Based Funding Components

Basic Operations and Instruction

# TJ21 Funding Model: Conceptual Framework

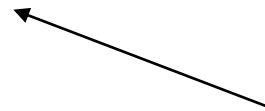


Student-based funding components



Need-Based Financial Aid

Per-Student Enrollment Growth Funding



Student-based funding components



## Basic Operations and Instruction

- Retain and update peer-based methodology refined over last decade to determine “Cost of Education” (COE) for each institution.
  - ✓ *Individual adjustments to be based on specified policies.*
- Incorporate longstanding policies on 67/33 funding split between State and institutions, plus 60<sup>th</sup> percentile of peer-group as faculty salary funding target.
- Provide for periodic re-calculation with interim inflation adjustments.
- Tuition and fees remain province of governing boards, but funding eligibility assumes tuition is set at or below the delta between the institution’s COE and what the State provides in base funding.
  - ✓ *Would not apply to tuition used to fund financial aid, state-mandated salary increases, and other specified costs.*



## Per-Student Enrollment Growth Funding

- Aim is to incentivize progress toward additional degree attainment goal.
  - ✓ *Achieved by providing incremental additional funding on a per-student basis for public institutions that increase enrollment above base level.*
- Set base year to reflect and reward unfunded enrollment increases implemented in recent years to meet student demand.
  - ✓ *Goal is to enable institutions to sustain those higher enrollment levels going forward.*
- Tuition Assistance Grants (TAG) currently provide this incentive to private institutions through a fixed per-student commitment.
  - ✓ *Policy goal is for equal amount of incremental additional funding to follow a student to a public or (not-for-profit) private institution.*



## Need-Based Financial Aid

- Increase state support for need-based financial aid over time.
- Ameliorate “middle-income squeeze” whereby students and families in financial mid-range currently face tuition costs beyond what they can afford but income is too high for adequate federal aid.
  - ✓ *Extend aid eligibility to more middle-income families.*
  - ✓ *Consider guaranteed loan options, including loan forgiveness policies that incentivize college completion and beneficial post-college activities.*
- Coordinate with institutions to provide more consistency in meeting financial need across the system.





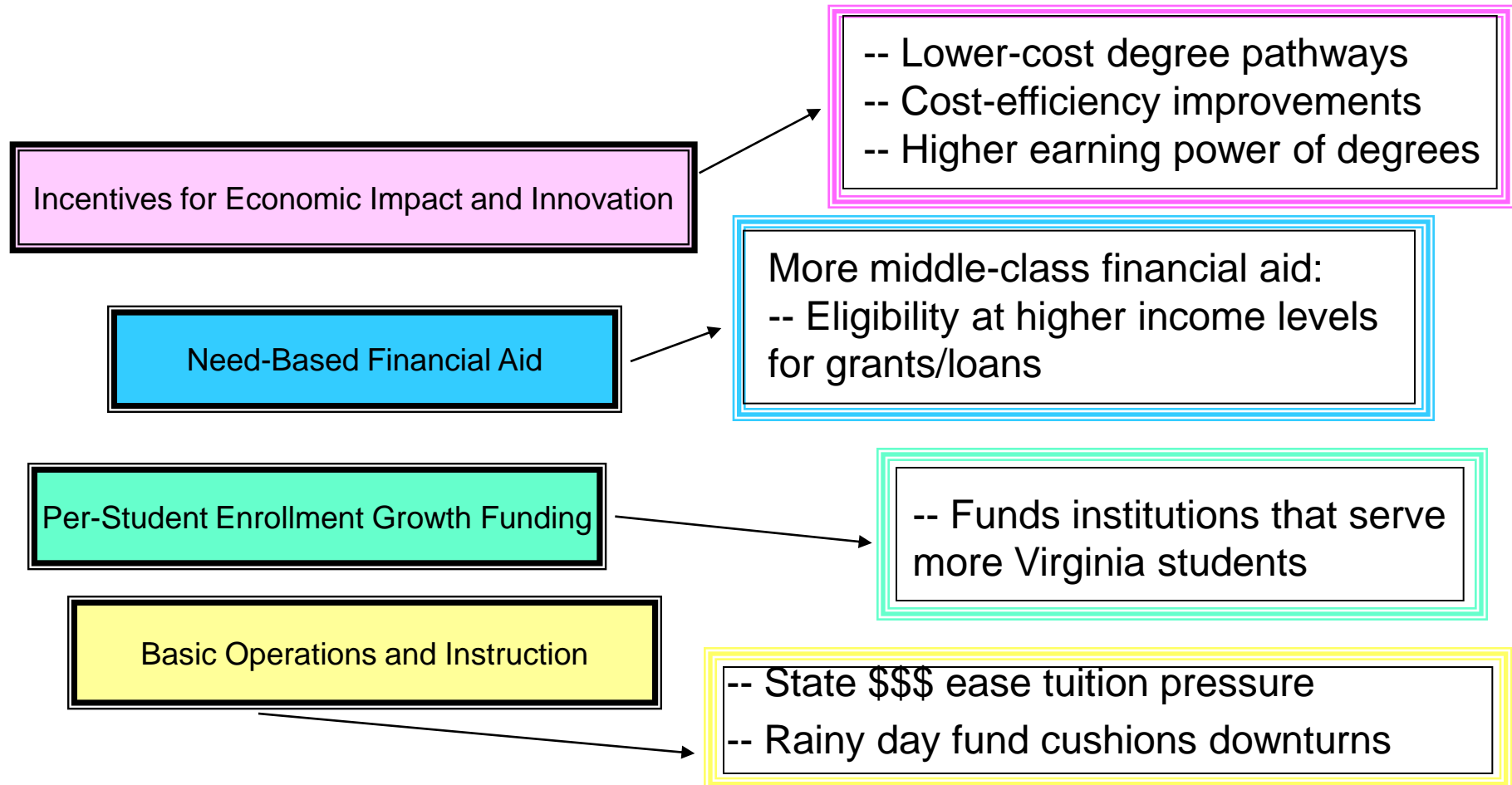
## Incentives for Economic Impact and Innovation

- Funding incentives (over and above base funding) for major policy initiatives related to economic growth and innovation/reform.
  - ✓ *Institutions to retain discretion and respond entrepreneurially based on their distinctive missions, programs, and opportunities.*
- Incentives to be targeted at specific policies, rather than pooled as under current Restructuring Act provision.
- Priorities for incentive funding to include:
  - ✓ *STEM initiatives*
  - ✓ *Public-private research initiative*
  - ✓ *Graduation rate and expedited completion initiatives*
  - ✓ *Technology-enhanced instruction and resource-sharing initiatives*
  - ✓ *Year-round utilization and other efficiency reforms*
  - ✓ *Community college transfer grants and other pathway incentives*

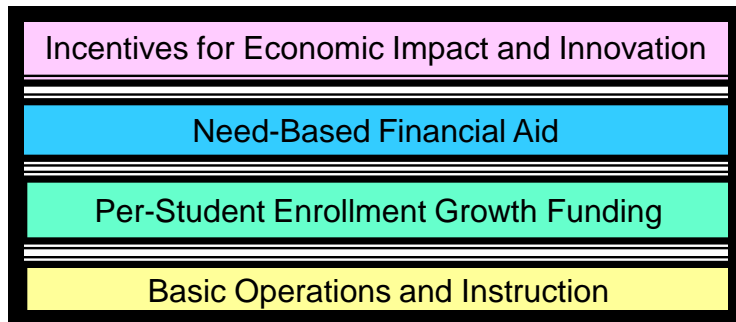
# TJ21 Funding Model: Conceptual Framework



## How will affordable access be enhanced by this model?



# TJ21 Funding Model: Conceptual Framework



## How will further Restructuring be reflected in the model?

**\* Maintain current 3-tier approach to levels of managerial autonomy.**

- \* Revise performance measures and replace pooled incentives with new metrics and specific incentives tied to key economic and reform/innovation policies.**
- Revise current financial and academic planning component to align it with this model, with each institution having a plan/agreement tied to funding eligibility.**
  - Each institution to make commitments regarding Virginia student degree conferral target, year-round optimization, and instructional resource-sharing.**
  - Agreements to be planning tools subject to administrative approval and legislative oversight in lieu of prior legislative approval.**
  - Use institutional plans to enhance information flow among institutions, between institutions and State, and between institutions and consumers.**
- \* Enhanced institutional flexibility to be addressed via legislation (if system-wide) or agreements (if institution-specific).**



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